

# Work Order ID 59298

Monday, May 31, 2010 12:47:05 PM



Page 1

Item ID: D2571

Accept



Setup Start



Revision ID:

Item Name: Saddle, Fwd Out 205

Stop



Start Date: 5/31/2010 Start Qty: 8.00

Cust Item ID:

Required Date: 6/14/2010 Req'd Qty: 8.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-3-1

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2571

Rev E

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No: 59298 Double check by: *SB* ☐ 1-Machine Step No 1  
per Folio FA051 and inspect per attached Dimension Sheets ☐ 2-Machine Step  
No 2 per Folio FA051 and inspect per attached Dimension Sheets ☐ 3-Machine  
Step No 3 per Folio FA051 and inspect

110

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2571 & D2572

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: 02571 PAR #: \_\_\_\_\_ Fault Category: Machining NCR: (Yes) No DQA: ✓ Date: 1006-07  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: ✓ Date: 10/06/14

NCR: <u>59298</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10/06/06</u>	<u>110</u>	<u>iland area is .200 smaller because original was taken wrong</u>  <u>QC operator error L&amp;A</u>	<u>[Signature]</u> <u>10/06/06</u>	<u>Scrap &amp; replace x1</u> <u>M58677</u> <u>destroy schedule.</u>	<u>MW=</u> <u>10/06/06</u>	<u>[Signature]</u> <u>10/06/08</u>	<u>[Signature]</u> <u>10/06/08</u>	<u>[Signature]</u> <u>10/06/08</u>

NOTE: Date & initial all entries

**Work Order ID 59298**

Monday, May 31, 2010 12:47:05 PM



Page 2

Item ID: D2571

Accept



Setup Start



Revision ID:

Item Name: Saddle, Fwd Out 205

Stop



Start Date: 5/31/2010 Start Qty: 8.00



Cust Item ID:

Required Date: 6/14/2010 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

2nd 10/06/10

12

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

12 BR 10-6-10.

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

=&gt; 10/06/11

12 0

Powder Coating

START TIME: 8:15am ☐ OVEN TEMPERATURE:  
8:45am ☐ FINISH TIME: 320°

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 59298**

Monday, May 31, 2010 12:47:05 PM



Page 3

Item ID: D2571

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Fwd Out 205

Start Date: 5/31/2010 Start Qty: 8.00



Cust Item ID:

Required Date: 6/14/2010 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

(12) . BR 10-6-11

170



Packaging

Packaging

Identify as per dwg &amp; Stock Location: 433

0.00

Memo

0.00

10/6/14 (12)

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/06/14 MF 10-6-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, May 31, 2010 12:47:11 PM

Page 1

Work Order ID: 59298



Parent Item: D2571



Parent Item Name: Saddle, Fwd Out 205

Start Date: 5/31/2010

Required Date: 6/14/2010

Comments: IPP: I 02.10.02 Re-format; Change to Dwg Rev. D & incorporated  
D2572 KJ

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			100	Each	2.0000	1	8			



Saddle Billet



Location

Loc Qty

Loc Code

MAT42

2

46412

2

DI 6/6/04 → 58677

~~12~~ 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 55298
<b>Description:</b> Saddle, Fwd Outboard		<b>Part Number:</b> D2571
<b>Inspection Dwg:</b> D2571 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions					Date
				1	2	3	4	5	
A	0.438	0.443		0.440	0.440	0.440	0.440	0.440	0.440
B	1.745	1.755		1.747	1.747	1.747	1.747	1.747	1.750
C	3.495	3.505		3.500	3.500	3.498	3.498	3.498	3.500
D	1.745	1.755		1.747	1.747	1.747	1.747	1.748	1.750
E	7.990	8.010		8.006	8.004	8.007	8.005	8.004	8.004
F	0.490	0.510		0.506	0.510	0.500	0.501	0.502	0.502
G	0.257	0.262		0.260	0.260	0.260	0.260	0.260	0.260
H	0.375	0.380		0.377	0.377	0.377	0.377	0.377	0.377
I	0.490	0.510		0.500	0.500	0.500	0.500	0.500	0.500
J	1.174	1.184		1.174	1.175	1.175	1.177	1.178	1.178
K	0.558	0.578		0.565	0.566	0.565	0.571	0.570	0.570
L	1.174	1.184		1.176	1.177	1.176	1.177	1.178	1.178
M	1.490	1.500		1.497	1.497	1.496	1.496	1.496	1.497
N	2.495	2.505		2.499	2.497	2.498	2.498	2.499	2.500
O	3.869	3.879		3.873	3.872	3.873	3.873	3.873	3.873
P	0.115	0.135		0.128	0.125	0.125	0.125	0.127	0.126
Q	0.115	0.135		0.135	0.135	0.135	0.135	0.135	0.135
R	0.240	0.260		0.251	0.250	0.251	0.251	0.251	0.251
S	0.115	0.135		0.132	0.128	0.131	0.126	0.127	0.127
T	0.178	0.198		0.188	0.188	0.188	0.188	0.188	0.188
U	2.940	2.980		2.956	2.956	2.957	2.960	2.957	2.957
V	0.230	0.250		0.243	0.242	0.240	0.240	0.239	0.238
W	0.115	0.135		0.130	0.125	0.123	0.120	0.127	0.128
X	0.308	0.313		0.311	0.311	0.311	0.311	0.311	0.313
Y	0.760	0.765		0.760	0.760	0.760	0.760	0.760	0.762
Z	0.352	0.372		0.362	0.362	0.360	0.360	0.360	0.360
AA	0.470	0.530		0.500	0.500	0.500	0.500	0.500	0.500
AB	0.615	0.635		0.627	0.627	0.626	0.626	0.626	0.628
AC	0.053	0.073		0.063	0.063	0.063	0.063	0.063	0.063
AD	0.240	0.260		0.250	0.250	0.250	0.250	0.250	0.250
AE	1.375	1.395		1.385	1.386	1.389	1.388	1.388	1.388
AF	0.115	0.135		0.135	0.135	0.135	0.135	0.135	0.135
AG	0.240	0.280		0.250	0.250	0.250	0.254	0.255	0.254
AH	0.240	0.260		0.252	0.252	0.250	0.250	0.250	0.251
AI	2.000	2.020		2.000	2.000	2.005	2.002	2.002	2.002
AJ	0.023	0.043		0.033	0.033	0.033	0.033	0.033	0.033
Accept/Reject									

Measured by:	NMF
Date:	01/06/05

Audited by:	[Signature]
Date:	16/10/10

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 59298
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b> D2571
<b>Inspection Dwg:</b> D2571 Rev. E	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

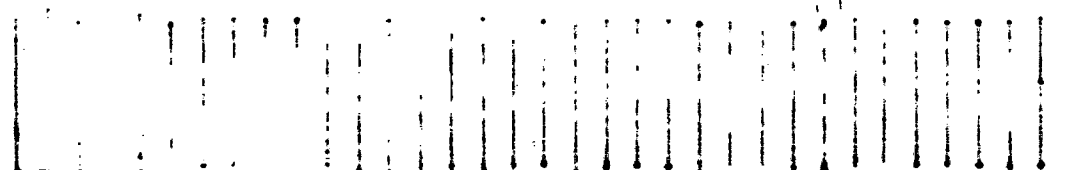
				Recorded Actual Dimensions						
Dim	Min	Max	Go/No Go Gauge	17	18	19	10	By	Date	13
A	0.438	0.443		0.441	0.441	0.441	0.441	0.441	0.441	0.441
B	1.745	1.755		1.750	1.750	1.750	1.750	1.750	1.750	1.750
C	3.495	3.505		3.500	3.500	3.500	3.500	3.500	3.500	3.500
D	1.745	1.755		1.750	1.750	1.750	1.750	1.750	1.750	1.750
E	7.990	8.010		8.004	8.004	8.004	8.004	8.004	8.004	8.004
F	0.490	0.510		0.506	0.506	0.503	0.496	0.499	0.500	0.507
G	0.257	0.262		0.260	0.260	0.260	0.260	0.260	0.260	0.260
H	0.375	0.380		0.377	0.377	0.377	0.377	0.377	0.377	0.377
I	0.490	0.510		0.501	0.500	0.501	0.502	0.504	0.502	0.503
J	1.174	1.184		1.177	1.179	1.179	1.179	1.179	1.179	1.179
K	0.558	0.578		0.565	0.568	0.568	0.569	0.571	0.569	0.570
L	1.174	1.184		1.176	1.179	1.179	1.179	1.179	1.179	1.179
M	1.490	1.500		1.496	1.495	1.495	1.495	1.495	1.495	1.495
N	2.495	2.505		2.503	2.500	2.500	2.500	2.500	2.500	2.500
O	3.869	3.879		3.875	3.874	3.874	3.874	3.874	3.874	3.874
P	0.115	0.135		0.125	0.125	0.125	0.125	0.125	0.125	0.124
Q	0.115	0.135		0.135	0.135	0.132	0.134	0.135	0.133	0.133
R	0.240	0.260		0.251	0.251	0.251	0.253	0.253	0.253	0.253
S	0.115	0.135		0.130	0.131	0.130	0.133	0.127	0.129	0.128
T	0.178	0.198		0.188	0.188	0.188	0.188	0.188	0.188	0.188
U	2.940	2.980		2.958	2.959	2.960	2.960	2.960	2.960	2.960
V	0.230	0.250		0.240	0.242	0.240	0.240	0.238	0.240	0.237
W	0.115	0.135		0.123	0.122	0.123	0.123	0.123	0.121	0.122
X	0.308	0.313		0.311	0.311	0.311	0.311	0.311	0.311	0.311
Y	0.760	0.765		0.762	0.762	0.762	0.762	0.762	0.762	0.762
Z	0.352	0.372		0.361	0.362	0.362	0.362	0.361	0.361	0.362
AA	0.470	0.530		0.500	0.500	0.500	0.500	0.500	0.500	0.500
AB	0.615	0.635		0.629	0.627	0.629	0.628	0.627	0.626	0.626
AC	0.053	0.073		0.063	0.063	0.063	0.063	0.063	0.063	0.063
AD	0.240	0.260		0.250	0.250	0.252	0.255	0.250	0.252	0.249
AE	1.375	1.395		1.389	1.3865	1.3865	1.3885	1.3905	1.389	1.389
AF	0.115	0.135		0.135	0.130	0.135	0.135	0.135	0.135	0.135
AG	0.240	0.280		0.269	0.269	0.270	0.270	0.270	0.270	0.270
AH	0.240	0.260		0.254	0.250	0.250	0.250	0.247	0.249	0.247
AI	2.000	2.020		2.003	2.001	2.001	2.000	2.002	2.0005	2.0005
AJ	0.023	0.043		0.033	0.033	0.033	0.033	0.033	0.033	0.033

Accept/Reject

Measured by:	10/06/08 DJT
Date:	

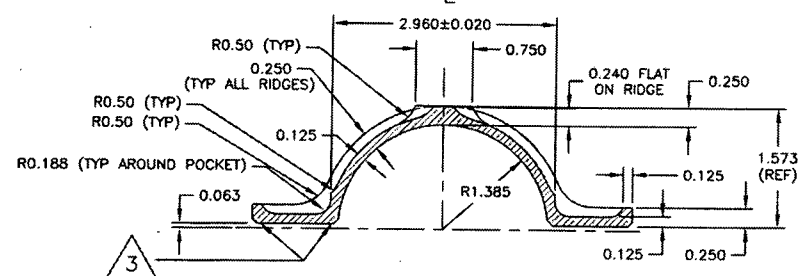
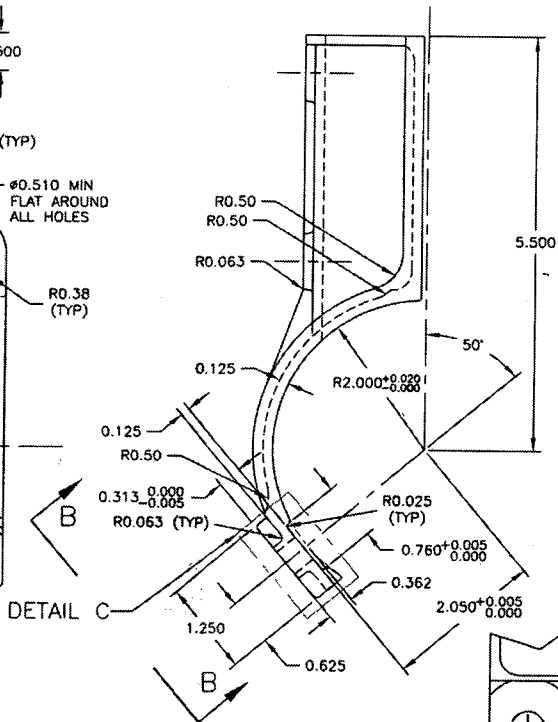
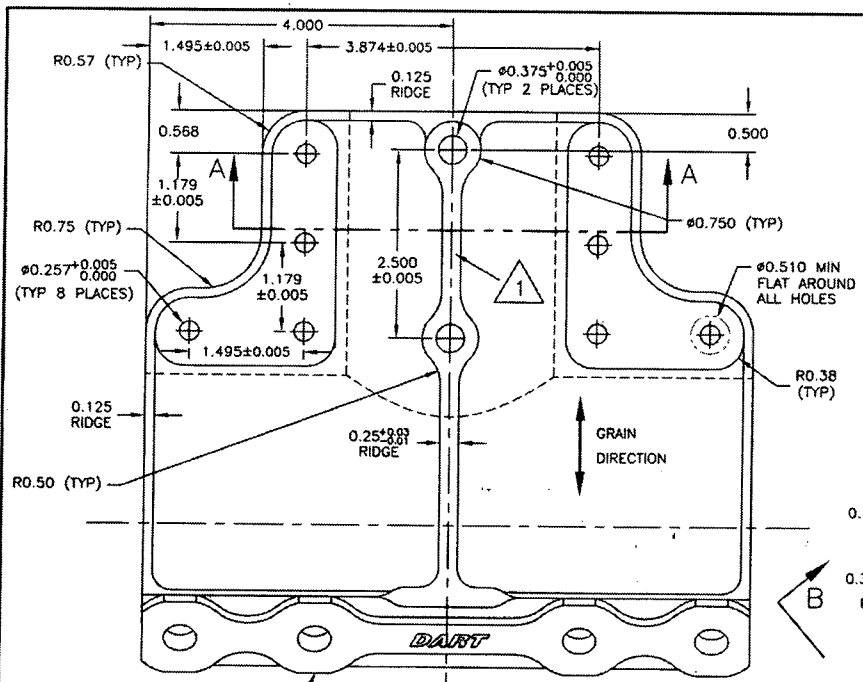
Audited by:	9m/
Date:	10/10/10

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	



RELEASED

05.12.06

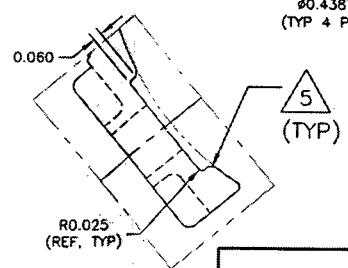
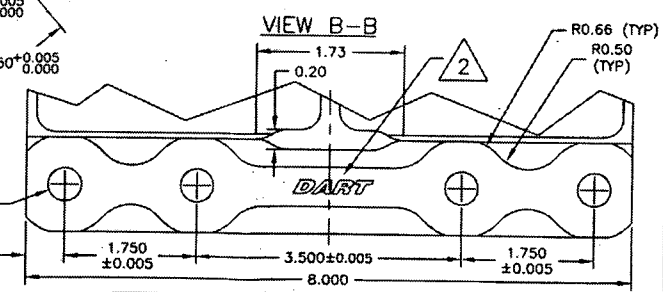


SECTION A-A

NOTES

MATERIAL: 7075-T7351 (Q0-A-250/12) (REF DART SPEC. D6102-001)  
 FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3  
 BREAK ALL SHARP EDGES 0.010 TO 0.020  
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)



SHOP COPY  
 RETURN TO  
 ENGINEERING

DETAIL C  
 SCALE 4:3

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E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	#	APPROVED #
DATE	05.07.13	DRAWING NO. D2571
		TITLE OUTER FWD SADDLE
		REV. E SHEET 1 OF 1 SCALE 2:3

UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 39295  
 2110-5-31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries